## What are stimulants

## As the name suggests, stimulants are a class of drugs that enhance brain activity

## They cause an increase in alertness, attention, and energy that are accompanied by elevated blood pressure and increased heart rate and respiration.

## Stimulants were used historically to treat asthma and other respiratory problems, obesity, neurological disorders, and a variety of other ailments.

## But as their potential for abuse and addiction became apparent, the medical use of stimulants began to wane.

## Now, stimulants are prescribed for the treatment of only a few health conditions, including narcolepsy, attention-deficit hyperactivity disorder, and depression that has not responded to other treatments.

## Stimulants may be used as appetite suppressants for short-term treatment of obesity, and they also may be used for patients with asthma.

## How do stimulants affect the brain and body

* Stimulants, such as dextroamphetamine (Dexedrine) and methylphenidate (Ritalin), have chemical structures that are similar to a family of key brain neurotransmitters called monoamines, which include norepinephrine and dopamine. Stimulants increase the amount of these chemicals in the brain.
* This, in turn, increases blood pressure and heart rate, constricts blood vessels, increases blood glucose, and opens up the pathways of the respiratory system.
* In addition, the increase in dopamine is associated with a sense of euphoria that can accompany the use of these drugs

## Treating addiction to prescription stimulants

* Treatment of addiction to prescription stimulants, such as Ritalin, is often based on behavioral therapies proven effective for treating cocaine or methamphetamine addiction.
* At this time, there are no proven medications for the treatment of stimulant addiction.
* However, antidepressants may help manage the symptoms of depression that can accompany the early days of abstinence from stimulants.
* Depending on the patient's situation, the first steps in treating prescription stimulant addiction may be tapering off the drug's dose and attempting to treat withdrawal symptoms.
* The detoxification process could then be followed by one of many behavioral therapies.
* Contingency management, for example, uses a system that enables patients to earn vouchers for drug-free urine tests.
* The vouchers can be exchanged for items that promote healthy living.
* Another behavioral approach is cognitive-behavioral intervention, which focuses on modifying the patient's thinking, expectations, and behaviors while at the same time increasing skills for coping with various life stressors.
* Recovery support groups may also be effective in conjunction with behavioral therapy.

<http://teens.drugabuse.gov/facts/facts_stim1.php>

<http://www.drug-addiction.com/stimulants.htm>

 

